

Title (en)
ENERGY CABLE HAVING A CROSSLINKED ELECTRICALLY INSULATING LAYER, AND METHOD FOR EXTRACTING CROSSLINKING BY-PRODUCTS THEREFROM

Title (de)
ENERGIEKABEL MIT EINER VERNETZTEN ELEKTRISCH ISOLIERENDEN SCHICHT UND VERFAHREN ZUR EXTRAKTION VON VERNETZENDEN NEBENPRODUKTEN DARAUS

Title (fr)
CÂBLE D'ÉNERGIE MUNI D'UNE COUCHE ÉLECTRIQUEMENT ISOLANTE RÉTICULÉE, ET PROCÉDÉ D'EXTRACTION DES PRODUITS DÉRIVÉS DE LA RÉTICULATION DE CELUI-CI

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Abstract (en)
[origin: WO2015059520A1] The present invention relates to an energy cable comprising at least one cable core comprising an electric conductor, a crosslinked electrically insulating layer, and zeolite particles placed in the cable core. The zeolite particles are able to extract and absorb, very efficiently and irreversibly, the by-products deriving from the cross-linking reaction, so as to avoid space charge accumulation in the insulating material during cable lifespan. Moreover, the present invention relates to a method for extracting crosslinking by-products from a cross-linked electrically insulating layer of an energy cable core, which comprises manufacturing the energy cable core comprising zeolite particles, heating the energy cable core up to a temperature causing migration of the crosslinking by-products from the crosslinked electrically insulating layer; and then placing a metal screen around the energy cable core. The zeolite particles substantially irreversibly absorb some of the crosslinking by-products during the heating step, while a fraction of crosslinking by-products which is gaseous at ambient temperature, such as methane, or which has a low boiling point, is eliminated by causing it to diffuse out of the cable core.

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